



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,078	09/22/2003	Kazuma Goto	501152.20021	1248

7590

09/15/2005

Eugene LeDonne  
Reed Smith, LLP  
29th Floor  
599 Lexington Avenue  
New York, NY 10022

EXAMINER

FAISON, VERONICA F

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/668,078

Applicant(s)

GOTO ET AL.

Examiner

Veronica F. Faison

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

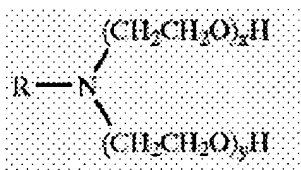
### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koga et al (US Patent 6,758,889) in view of Momose (US Patent 6,749,675).

Koga et al teach ink composition comprising water, a coloring agent, a water-soluble organic solvent, and a compound represented by following general formula (1):



wherein R represents an alkyl group having a number of carbons of 8 to 18, and x+y is not more than 10. The compound may be present in the amount of 0.01 to 5 percent by weight (col. 5 lines 38-46). The reference further teaches a surface tension of the ink is controlled to 31 to 35 mN/m, which can reduce color bleed and feathering (abstract and col. 2 lines 27). The coloring agent may be dyes and pigments, wherein the pigment may also be a surface treatment, which may make the pigment self-dispersing (col. 3 lines 18-36). The surfactant that is present in the ink composition may be an anionic surfactant (col. 3 lines 60-65) and may be present in the amount of 0.01 to 20 percent

Art Unit: 1755

by weight (col. 3 line 66-col. 4 line 3). The reference fails to teach the specific compound taught by formula 1.

Momose teach an aqueous ink composition at least colorant, water, and 0.005 to 10 percent by weight of at least one acetylene alcohol compound (abstract and col. 2 lines 5-22). The reference teach anionic surfactant of formula below



wherein  $R_{15}$  is represents a  $C_{1-15}$  alkyl group and  $M_2$  may be an alkali metal (col. 2 lines 43-54). The reference further teaches that the formula above may be sodium polyoxyethylene oleyl ether sulfate, which may be used in a composition comprising a surface-modified pigment (Table 8).

Therefore it would have been obvious to one of ordinary skill in the art to use the anionic surfactant sodium polyoxyethylene oleyl ether sulfate as taught by Momose in the ink composition of Koga et al, as Koga et al broadly discloses anionic surfactants, because Momose teaches that sodium polyoxyethylene oleyl ether sulfate may be used in combination with a nonionic surfactant and self-dispersing pigment that produces an ink composition similar to that taught by Koga et al.

Claims 1, 5-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-140065.

JP 10-140065 teaches a water-based recording liquid comprising an anionic microcapsulate pigment coated with an acrylic resin neutralized carboxyl group and a water-soluble anionic surfactant and/or a nonionic surfactant (abstract and 0009). The reference further teaches that the anionic surfactant may be polyoxyethylene lauryl

Art Unit: 1755

ether sulfate sodium and present in the amount of 0.1 to 20 percent by weight . The water-soluble organic solvent may also present in the ink composition (0111). JP 10-140065 fails to specifically exemplify the use of the specific structure set forth by formula (1) and a surfactant which has a nitrogen atom as claimed by applicant.

Therefore, it would have been obvious to one of ordinary skill in the art to use the specific structure set forth by formula (1) and a surfactant which has a nitrogen atom as claimed by applicant as JP 10-140065 also discloses the use of the specific structure set forth by formula (1) and a surfactant which has a nitrogen atom but shows no example incorporating them.

### ***Conclusion***

The remaining references listed on forms 892 and 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

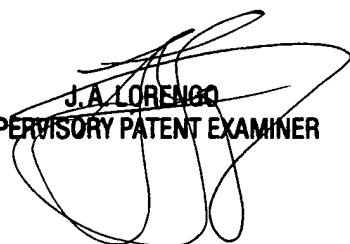
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VFF  
9-1-05

  
J.A. LORENZO  
SUPERVISORY PATENT EXAMINER